WHAT IS CLAIMED IS:

1. A monomeric monocyclic peptide which interferes with a biological activity of at least one factor selected from the group consisting of VEGF, VEGF-C, and VEGF-D mediated by at least one receptor selected from the group consisting of VEGF receptor-2 and VEGF receptor-3.

2. A monomeric monocyclic peptide according to claim 1, which interferes with a biological activity of VEGF-C or VEGF-D mediated by VEGF receptor-2.

3. A monomeric monocyclic peptide according to claim 1, which interferes with a biological activity of VEGF-C or VEGF-D mediated by VEGF receptor-3.

4. A dimeric bicyclic peptide comprising two monomeric monocyclic peptides according to claim 1, linked together.

5. A method of making a monomeric monocyclic peptide, comprising:

obtaining a peptide loop fragment from an exposed loop of a growth factor protein or a corresponding loop fragment with one or more conservative amino acid substitutions;

measuring beta-beta carbon separation distances on opposing antiparallel strands of the loop fragment;

selecting a beta-beta carbon location with a separation distance less than 6 angstroms;

providing a cysteine residue in each opposing antiparallel strand at the selected beta-beta carbon location, and

cyclizing the peptide by oxidizing the provided cysteine residues to form a disulfide bridge between strands.

6. A method according to claim 5, wherein said exposed loop is loop 1, loop 2 or loop 3 of VEGF-D.

7. A method according to claim 5, wherein said provided cysteine residues occur naturally at opposite ends of the loop fragment.

8. A method according to claim 5, wherein said provided cysteine residues are synthetically inserted at opposite ends of the loop fragment.

9. A method according to claim 5, further comprising deleting one or two internal amino acid residues from said loop fragment prior to cyclizing the peptide.

10. A method according to claim 5, further comprising deleting at least one amino acid residue from said loop fragment prior to cyclizing the peptide.

11. A method according to claim 5, wherein said growth factor protein has a cystine-knot structure.

12. A monomeric, monocyclic peptide produced by the process of claim 5.

13. A monomeric, monocyclic peptide according to claim 12, which interferes with a biological activity of at least one factor selected from the group consisting of VEGF, VEGF-C, and VEGF-D mediated by at least one receptor selected from the group consisting of VEGF receptor-2 and VEGF receptor-3.

14. A dimeric bicyclic peptide comprising two monomeric monocyclic peptides according to claim 12, linked together.

15. A dimeric bicyclic peptide according to claim 14, wherein the two monomeric monocyclic peptides are identical.

16. A dimeric bicyclic peptide according to claim 14, wherein the two monomeric monocyclic peptides are different.

17. A dimeric bicyclic peptide according to claim 14, which interferes with a biological activity of at least one factor selected from the group consisting of VEGF, VEGF-C, and VEGF-D mediated by at least one receptor selected from the group consisting of VEGF receptor-2 and VEGF receptor-3.

18. A cyclic peptide produced according to the method of claim 10, which interferes with a biological activity of at least one factor selected from the group consisting of VEGF, VEGF-C, and VEGF-D mediated by at least one receptor selected from the group consisting of VEGF receptor-2 and VEGF receptor-3.

19. A method of making a dimeric bicyclic peptide, comprising:

providing first and second linear peptides each having a pair of linking groups and a cysteine residue protected by a first protecting group;

reacting the linking groups of each linear peptide with each other to form respective, partially protected, monomeric monocyclic peptides; and

oxidizing the protected cysteine residues to form disulfide bridges linking two monomeric monocyclic peptides together to obtain a dimeric bicyclic peptide.

20. A method according to claim 19, wherein said linking groups comprise cysteine residues protected by a second protecting group which oxidizes under different conditions than said first protecting group.

21. A method according to claim 19, wherein the first and second linear peptides are identical, and the dimeric bicyclic peptide is a homodimer.

22. A method according to claim 19, wherein the first and second linear peptides are different, and the dimeric bicyclic peptide is a heterodimer.

23. A composition of matter comprising a monomeric monocyclic peptide according to claim 1, or a dimeric bicyclic peptide comprising two said monocylic peptides linked together, and at least one pharmaceutical carrier or adjuvant.

24. A composition of matter comprising a monomeric monocyclic peptide according to claim 12, and at least one pharmaceutical carrier or adjuvant.

25. A composition of matter comprising a dimeric, bicyclic peptide according to claim 14, and at least one pharmaceutical carrier or adjuvant.

26. A composition of matter comprising a cyclic peptide according to claim 18, and at least one pharmaceutical carrier or adjuvant.

27. A method of interfering with at least one biological activity induced by VEGF, VEGF-C or VEGF-D, comprising administering an effective biological activity interfering amount of a monomeric monocyclic peptide according to claim 1, or a dimeric bicyclic peptide comprised of two of said monomeric monocyclic peptides linked together.

28. A method of interfering with at least one biological activity induced by a growth factor protein, comprising administering an effective biological activity interfering

amount of a receptor-binding monomeric monocyclic peptide according to claim 12, obtained from a peptide loop fragment of said growth factor protein or a corresponding loop fragment with one or more conservative amino acid substitutions.

29. A method according to claim 28, wherein said growth factor protein is VEGF, VEGF-C or VEGF-D.

30. A method according to claim 28, wherein said at least one biological activity is mediated by VEGF receptor-2 or VEGF receptor-3.

31. A method according to claim 28, wherein said at least one biological activity is selected from the group consisting of lymphangiogenesis, vascular permeability, angiogenesis, endothelial cell proliferation, and endothelial cell differentiation.

32. A method of interfering with at least one biological activity induced by a growth factor protein, comprising administering an effective biological activity interfering amount of a receptor-binding dimeric bicyclic peptide according to claim 14, obtained by cyclizing peptide loop fragments of said growth factor protein or corresponding loop fragments with one or more conservative amino acid substitutions and dimerizing two such cyclized fragments.

33. A method according to claim 32, wherein said growth factor protein is VEGF, VEGF-C or VEGF-D.

34. A method according to claim 32, wherein said at least one biological activity is mediated by VEGF receptor-2 or VEGF receptor-3.

35. A method according to claim 32, wherein said at least one biological activity is selected from the group consisting of lymphangiogenesis, vascular permeability, angiogenesis, endothelial cell proliferation, and endothelial cell differentiation.

36. A method of interfering with angiogenesis, neovascularization or lymphangiogenesis in a mammal having a condition characterized by angiogenesis, neovascularization or lymphangiogenesis, comprising administering to said mammal an effective angiogenesis, neovascularization or lymphangiogenesis inhibiting amount of a monomeric, monocyclic peptide according to claim 1, or a dimeric bicyclic peptide comprised of two of said monomeric, monocyclic peptides linked together.

37. A method of interfering with angiogenesis, neovascularization or lymphangiogenesis in a mammal having a condition characterized by angiogenesis, neovascularization or lymphangiogenesis, comprising administering to said mammal an effective angiogenesis, neovascularization or lymphangiogenesis inhibiting amount of a monomeric, monocyclic peptide according to claim 12.

38. A method according to claim 37, wherein said condition characterized by angiogenesis, neovascularization or lymphangiogenesis is diabetic retinopathy, psoriasis, arthropathy, hemangioma, vascularized malignant or benign tumor, post-recovery cerebrovascular accident, post-angioplasty restenosis, head trauma, heat trauma and cold trauma, substance-induced neovascularization of the liver, excessive hormone related angiogenic dysfunction, diabetes induced neovascular sequelae, hypertension induced neovascular sequelae, chronic liver infection.

39. A method of interfering with angiogenesis, neovascularization or lymphangiogenesis in a mammal having a condition characterized by angiogenesis, neovascularization or lymphangiogenesis, comprising administering to said mammal an effective angiogenesis, neovascularization or lymphangiogenesis inhibiting amount of a dimeric, bicyclic peptide according to claim 14.

40. A method according to claim 39, wherein said condition characterized by angiogenesis, neovascularization or lymphangiogenesis is diabetic retinopathy, psoriasis, arthropathy, hemangioma, vascularized malignant or benign tumor, post-recovery cerebrovascular accident, post-angioplasty restenosis, head trauma, heat trauma and cold trauma, substance-induced neovascularization of the liver, excessive hormone related angiogenic dysfunction, diabetes induced neovascular sequelae, hypertension induced neovascular sequelae, chronic liver infection.

41. A method of interfering with angiogenesis, neovascularization or lymphangiogenesis in a mammal having a condition characterized by angiogenesis, neovascularization or lymphangiogenesis, comprising administering to said mammal an effective angiogenesis, neovascularization or lymphangiogenesis inhibiting amount of a cyclic peptide according to claim 18.

42. A method according to claim 41, wherein said condition characterized by angiogenesis, neovascularization or lymphangiogenesis is diabetic retinopathy, psoriasis, arthropathy, hemangioma, vascularized malignant or benign tumor, post-recovery cerebrovascular accident, post-angioplasty restenosis, head trauma, heat trauma and cold trauma, substance-induced neovascularization of the liver, excessive hormone related angiogenic dysfunction, diabetes induced neovascular

sequelae, hypertension induced neovascular sequelae, chronic liver infection.

43. A method of modulating vascular permeability in a mammal, said method comprising administering to said mammal an effective vascular permeability modulating amount of a monomeric monocyclic peptide according to claim 1, or a dimeric bicyclic peptide comprised of two of said monomeric monocyclic peptides linked together.

44. A method of modulating vascular permeability in a mammal, said method comprising administering to said mammal an effective vascular permeability modulating amount of a monomeric monocyclic peptide according to claim 12.

45. A method according to claim 44, wherein said mammal has a condition characterized by vascular permeability related fluid accumulation in peripheral limbs or in a body cavity selected from the group consisting of lungs, peritoneal cavity, pleura, and brain, and said method comprises administering to said mammal an effective vascular permeability decreasing amount of said monomeric, monocyclic peptide.

46. A method of modulating vascular permeability in a mammal, said method comprising administering to said mammal an effective vascular permeability modulating amount of a dimeric bicyclic peptide according to claim 14.

47. A method according to claim 46, wherein said mammal has a condition characterized by vascular permeability related fluid accumulation in peripheral limbs or in a body cavity selected from the group consisting of lungs, peritoneal cavity, pleura, and brain, and said method comprises administering to said mammal an effective vascular permeability decreasing amount of said dimeric bicyclic peptide.

48. A method for imaging blood vessels and lymphatic vasculature, comprising:

applying a labelled monomeric monocyclic peptide according to claim 12, or a dimeric bicyclic peptide obtained by joining two said monomeric monocyclic peptides together to a sample to be imaged;

allowing said peptide to bind to a cell surface receptor; and

imaging said binding.

49. A cyclic peptide comprising a peptide sequence selected from the group consisting of SEQ ID NO:5; SEQ ID NO:6; SEQ ID NO:7; SEQ ID NO:10; SEQ ID NO:11; SEQ ID NO:12; SEQ ID NO:13 and SEQ ID NO:14.

50. A cyclic peptide according to claim 49, wherein said peptide is a monomeric monocyclic peptide.

51. A cyclic peptide according to claim 50, wherein said peptide interferes with a biological activity mediated by at least one receptor selected from the group consisting of VEGF receptor-2 and VEGF receptor-3.

52. A cyclic peptide according to claim 49, comprising SEQ ID NO:5.

53. A cyclic peptide according to claim 49, comprising SEQ ID NO:6.

54. A cyclic peptide according to claim 49, comprising SEQ ID NO:7.

55. A cyclic peptide according to claim 49, comprising SEQ ID NO:13.

56. A cyclic peptide according to claim 49, wherein said peptide is a dimeric bicyclic peptide comprising two monocyclic peptides linked together.

57. A cyclic peptide according to claim 56, wherein said two monocyclic peptides are identical.

58. A cyclic peptide according to claim 56, wherein said two monocyclic peptides are different.

59. A cyclic peptide according to claim 56 comprising SEQ ID NO:8 or SEQ ID NO:9.

60. A cyclic peptide according to claim 59, wherein said peptide is a homodimer comprising two monocyclic peptides of SEQ ID NO:8 linked together.

61. A cyclic peptide according to claim 59, wherein said peptide is a homodimer comprising two monocyclic peptides of SEQ ID NO:9 linked together.

62. A cyclic peptide according to claim 59, wherein said peptide is a heterodimer comprising a monocyclic peptide of SEQ ID NO:8 linked to monocyclic peptide of SEQ ID NO:9.

63. A cyclic peptide according to claim 12, which interferes with the activity of VEGF-D and/or VEGF-C, but not VEGF, mediated by VEGF receptor-2.

64. A method of making a dimeric bicyclic peptide comprising:

synthesizing two linear peptides each comprising a peptide sequence corresponding to a loop fragment of an exposed loop of a growth factor protein or a corresponding loop fragment with

one or more conservative amino acid substitutions and including two spaced cysteine residues and a protected linking group;

oxidizing the spaced cysteine residues of each of the linear peptides to cyclize the peptide via a disulfide bridge and obtain a partially protected constrained monomeric monocyclic peptide; and

dimerizing the two partially protected monomeric monocyclic peptides to obtain a dimeric bicyclic peptide.

65. A method according to claim 64, further comprising purifying the dimeric bicyclic peptide.

66. A method of combination anti-tumor therapy comprising administering:

an effective biological activity interfering amount of a monomeric monocyclic peptide according to claim 1, or a dimeric bicyclic peptide comprised of two of said monomeric monocyclic peptides linked together,

in combination with an anti-tumor therapeutic agent selected from the group consisting of anti-tumor immunotherapeutic agents, DNA damaging electromagnetic radiation, and chemotherapeutic anti-tumor pharmaceutical compounds.

67. A method according to claim 66, wherein said anti-tumor therapeutic agent is an immunotherapeutic agent selected from the group consisting of antibodies which target the tumor, antibodies which target the tumor conjugated to a drug or toxin, and immune effector cells which target the tumor.

68. A method according toclaim66, wherein said anti-tumor therapeutic agent is a radiotherapeutic agent selected from the group consisting of γ-irradiation, X-rays, UV-irradiation, microwaves, and electronic emissions.

69. A method according to claim 66, wherein said anti-tumor therapeutic agent is a chemotherapeutic pharmaceutical compound selected from the group consisting of hydrogen peroxide, adriamycin, 5-fluorouracil, etoposide, camptothecin, actinomycin-D, mitomycin C, cisplatin, verapamil, and podophyllotoxin.

70. A method of treating a condition characterized by chronic inflammation in a patient suffering therefrom, comprising administering to said patient

an effective biological activity interfering amount of a monomeric monocyclic peptide according to claim 1, or a dimeric bicyclic peptide comprised of two of said monomeric monocyclic peptides linked together,

in combination with an anti-inflammatory agent.

71. A method according to claim 70, wherein said condition characterized by chronic inflammation is selected from the group consisting of rheumatoid arthritis, psoriasis and diabetic retinopathy.